DOCUMENT RESUME

ED 328 187 HE 024 242

TITLE	Texas Nursing Crisis: The Higher Education Response. A Report from the Nursing Committee.
INSTITUTION	Texas Higher Education Coordinating Board, Austin.
PUB DATE	Jul 90
NOTE	39p.
PUB TYPE	Viewpoints (120) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Certification; College Faculty; Demand Occupations; Enrollment; Higher Education; *Labor Needs; *Labor Supply; *Nurses; Nursing; *Nursing Education; *State Programs; Student Characteristics; *Supply and Demand
IDENTIFIERS	*Texas

ABSTRACT

This report was prepared in response to a mandate by the Texas legislature to study issues relating to the nursing shortage in Texas, career mobility among the various nursing programs, and collaboration among schools in geographic proximity. The data from the study were drawn from five public hearings, a survey of 60 nursing program directors, and discussions of the Nursing Study Committee. The study examines nursing education and licensing in Texas, including licensed vocational nurses, registered nurses, and advanced nursing degrees. The report analyzes the nursing shortage in Texas, Texas nursing programs' efforts to meet that shortage, the nursing faculty shortage, the impact of educational mobility on the shortage, and the changing population of nursing students. The Committee makes recommendations to the Texas Legislature, the Texas Higher Education Coordinating Board, the Board of Nurse Examiners and the Board of Vocational Nurse Examiners, and colleges and universities. Appendices contain the authorizing legislation for the study, minimum faculty qualifications for nursing programs, and statistical data on number of advanced degrees conferred in nursing, registered nurses employed in nursing by highest degree, and staff vacancy rates. (21 references) (JDD)

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Texas Nursing Crisis:

The Higher Education Response

A Report to the Texas Higher Education Coordinating Board
from the Nursing Study Committee

July 1990

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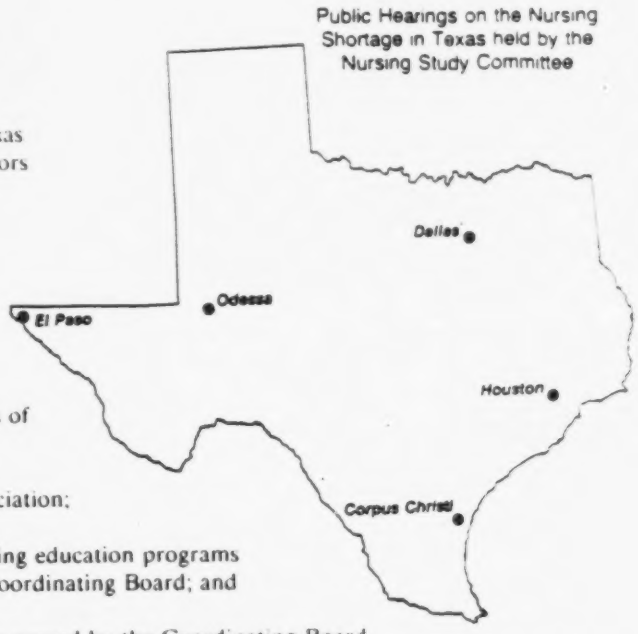
About This Study

The 71st Legislature enacted HCR 92 (appended), which directed the Coordinating Board "to study all issues and concerns relating to: (1) the nursing shortage; (2) career mobility among the various nursing programs, and (3) collaboration among schools in geographic proximity." To assist with the study, the legislation called for a 16-member advisory committee be convened to assist with the study, to be composed of:

- a chair named by the Coordinating Board;
- one representative from each of eight named nursing agencies or organizations

  Licensed Vocational Nurses Association of Texas
  Texas Association of Vocational Nurse Educators
  Texas Board of Nurse Examiners
  Texas Board of Vocational Nurse Examiners
  Texas League for Nursing
  Texas Nurses Association
  Texas Organization for the Advancement of Associate Degree Nursing
  Texas Organization of Nurse Executives;
- a representative named by deans and directors of nursing programs;
- a representative from the Texas Medical Association;
- one director of each of the four types of nursing education programs (LVN, Diploma, ADN, BSN) named by the Coordinating Board; and
- a representative of graduate nursing education named by the Coordinating Board.



To help make the Nursing Study Committee as broadly representative as possible, four additional ex officio members were invited to assist the Committee. These members represented the Board's Health Professions Education Advisory Committee, health science centers, and the southern and eastern geographic regions of the state. Finally, The Texas Employment Commission, the Texas Department of Mental Health and Mental Retardation, the Texas Department of Human Services, the Texas Education Agency, the Texas Department of Health, and the Texas Department of Corrections were asked to name liaisons to the Committee. A complete list of members, ex officio members, and liaisons is published as an appendix to this report.

Working subcommittees were formed to study several issues in depth: transition to the workplace; the practice arena and differentiated practice issues; the faculty shortage; manpower planning needs; and barriers to educational mobility. Five public hearings around the state (see map) allowed the Committee to gather information from all nursing entities around the state. A survey of nursing program directors was also completed. Directors from 60 of 64 institutions provided information on student educational mobility, program resources, and potential for program expansion. The full Committee met nine times between October 1989 and June 1990 to consider the nursing shortage, its causes, and possible educational solutions.

Summary of Recommendations

Hospitals and other clinical employers, state government, and nursing programs must coordinate their efforts to solve the nursing shortage.

The higher education sector cannot remedy the nursing shortage by itself. In keeping with the legislative charge to the Texas Higher Education Coordinating Board, the following recommendations by the Nursing Study Committee primarily concern what can be done within the Texas system of higher education.

To the Legislature

(1) That public and private, master's degree and entry-level, registered nursing programs be given additional state funds to increase graduations.

(2) That all formulas supporting nurse education be fully funded.

(3) That an educational loan repayment program be funded for graduate-prepared nurses who serve as faculty or as advanced nurse practitioners in underserved areas of the state.

(4) That nurse practitioner programs be expanded with additional state funds.

(5) That additional state funds be given to the Health Professions Resource Center of the Texas Department of Health to develop a statistical model to predict the supply of nurses and the demand for nursing services.

To the Coordinating Board

(6) That eight Regional Nursing Councils and a Texas Nursing Council be formed to promote educational mobility and collaborative uses of resources among different nursing programs and health care entities.

(7) That each nursing program be required to define a reasonable procedure for promoting educational mobility.

(8) That a program of recognition for exemplary nursing education programs be sponsored.

(9) That scarce nursing education resources be conserved by:

- evaluating the effectiveness of existing programs and options before new programs are established;
- requiring evidence of regional collaboration in the development of new programs; and
- encouraging satellite/outreach programs for educationally-underserved areas of the state before establishing new programs.

To the Board of Nurse Examiners and the Board of Vocational Nurse Examiners

(10) That the Board of Nurse Examiners and the Board of Vocational Nurse Examiners adopt essential competencies to be required of graduates from each type of entry-level nursing program.

(11) That the Board of Nurse Examiners and the Board of Vocational Nurse Examiners collect standardized licensure data (including demographic, educational, and employment characteristics of RNs and LVNs in Texas) using quality control procedures.

(12) That the Board of Nurse Examiners and the Board of Vocational Nurse Examiners update biannually and disseminate *Nursing Programs in Texas*, a fact book on nursing programs developed in prototype form by the Nursing Study Committee, as a tool for recruiting and advising.

To Colleges and Universities

(13) Ensure that nursing programs receive funds at or above the level generated by the nursing formula for at least the next five years.

(14) Ensure that faculty salaries and benefits are reasonably competitive with those in the clinical practice sector.

(15) Seek faculty position endowments from external sources rather than year-to-year salary augmentations.

(16) Make funds available for faculty professional development.

(17) Fund orientation and mentoring programs for inexperienced nursing faculty.

(18) Make special efforts to recruit students into BSN and MSN programs.

(19) Offer all required courses every semester for the duration of the nursing shortage crisis, whenever possible.

(20) Schedule nursing classes and clinical experiences to make optimal use of available classrooms, laboratory space, and clinical facilities.

(21) Help increase student retention by:

- Providing additional resources to meet student needs for tutoring and remedial assistance;
- Developing partnerships with industry to provide additional sources of financial assistance for students; and
- Providing student support systems including health clinics, counselors, and day care services.

Nursing Education and Licensing in Texas

Licensed Vocational Nurses

Licensed Vocational Nurses (LVNs) provide direct patient care under the supervision of Registered Nurses or physicians. In Texas, LVNs are usually educated in one-year programs of study in either community colleges or hospitals. To practice, graduates must be licensed by the Texas Board of Vocational Nurse Examiners.

There are more LVNs and more LVN programs in Texas than in any other state. In academic year 1988-89, Texas LVN programs enrolled 5,056 students and graduated 2,685 students. LVNs are eligible for accelerated Registered Nurse education in diploma, Associate Degree Nursing (ADN), or Bachelor of Science in Nursing (BSN) programs.

Registered Nurses

Different types of undergraduate educational programs prepare students to be licensed by the Texas Board of Nurse Examiners as new Registered Nurses (RNs):

- two-year ADN programs offered in community colleges and in a few universities;
- three-year diploma programs taught in a hospital setting;
- four-year baccalaureate programs in universities or health science centers which confer the BSN degree.

One new, non-traditional entry-level master's program is now available in Texas and should not be confused with the advanced MSN. Students with non-nursing baccalaureate degrees can complete a three-year program culminating in the Master of Science in Nursing degree. Graduates are then qualified to sit for RN licensure along with those from undergraduate two-year, three-year, and four-year RN preparatory programs.

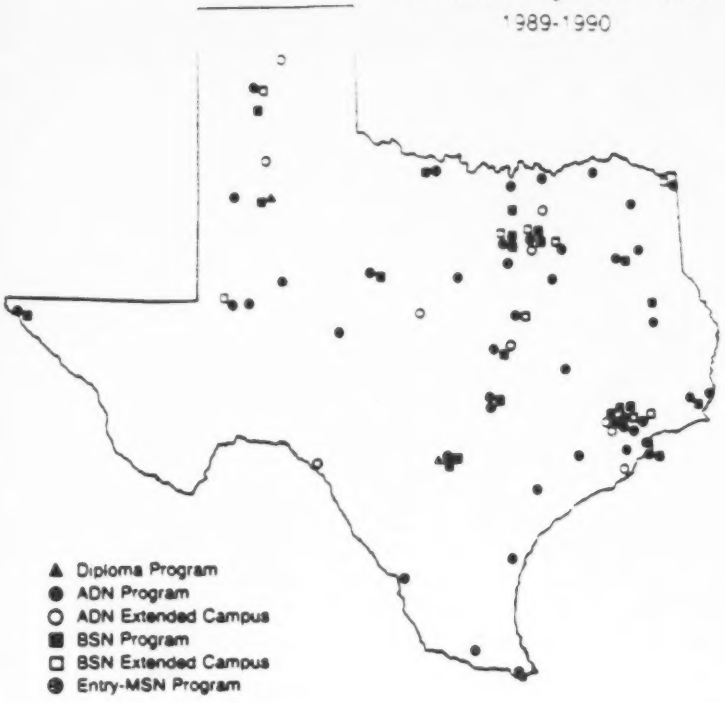
All of these RN preparatory programs cover a minimum core of education aimed at ensuring that graduates can safely provide basic nursing care. Beyond that core, the programs differ in emphases and goals. BSN programs teach a broader range of tasks for a wider range of settings than do diploma or ADN programs. RNs who are initially educated in ADN or diploma programs can return to school to earn an accelerated BSN degree.

Advanced Nursing Degrees

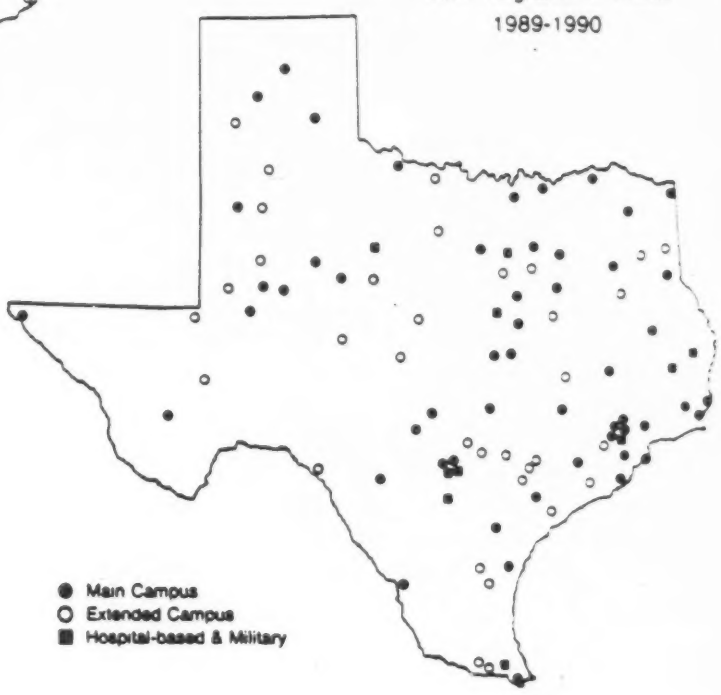
Eleven public institutions and one private institution in Texas offer advanced Master of Science in Nursing (MSN) programs which require BSN degrees for entry. These programs educate RNs to practice as advanced nurse practitioners, nurse administrators, or nursing faculty.

Three nurse education programs in Texas also offer doctoral degrees. One of these is new and will admit its first students in fall of 1991. These programs prepare administrators, educators, and researchers.

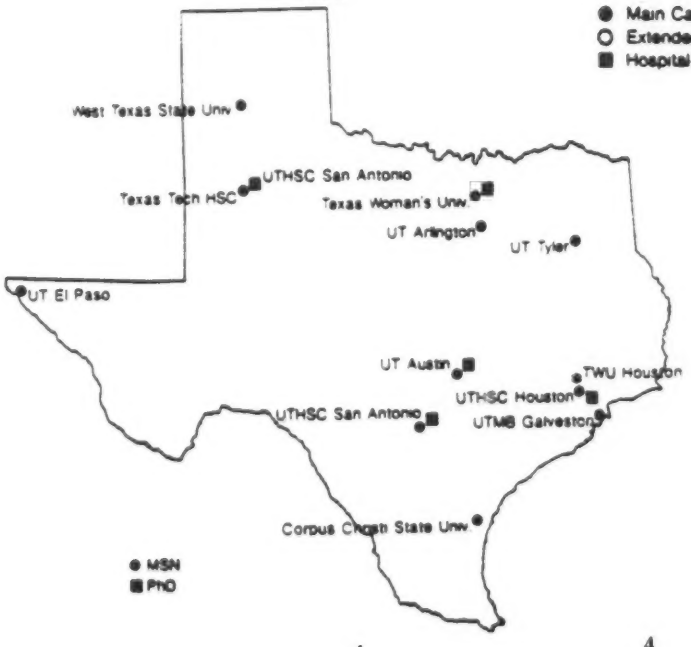
Entry-Level Registered Nurse
Education Programs in Texas
1989-1990



LVN Programs in Texas
1989-1990



MSN and PhD PROGRAMS
1990



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The network of nursing education programs in Texas is comprehensive:

- There are 100 Licensed Vocational Nurse preparatory programs located throughout the state.
- A Registered Nurse preparatory program is accessible to students in every community of 50,000 or greater population.
- A Master of Science in Nursing program is available within each of the eight public health regions in Texas.
- Three doctoral nursing education programs are now or will soon be offering PhD education in six major metropolitan areas.

While the various types of nurse education programs prepare graduates to practice in different ways, employers usually do not formally recognize these differences. They expect the same nursing performance for essentially the same salary.

To the frustration of many nurses, efforts to establish "differentiated practice" standards by employers to address these educational differences have been severely handicapped by the shortage.

As employers unable to hire RNs convert some RN vacancies to LVN positions, the roles of the RN and the LVN appear to be blurring somewhat, and the proportion of each in the workplace is shifting. These issues affect student recruitment, nurse recruitment and nurse retention, leading to an increased shortage.

The Nursing Shortage in Texas

"The nation's health care system is again facing a serious shortage of registered nurses (RNs), as it has several times since World War II. Unable to fill many nursing positions, hospitals have been forced to understaff some units, defer some admissions, even close some beds temporarily." (Commonwealth Fund Paper,1989)

The nursing shortage is real, and it threatens health care everywhere. Nationwide, 10 percent of budgeted positions for hospital staff RNs remain unfilled. The Texas Hospital Association survey of January 1990 reports a statewide vacancy rate of 15.4 percent for staff and 15.8 percent for critical care RNs. Cities with the highest vacancy rates are Austin at 21 percent, El Paso at 19 percent, and Dallas, Bryan-College Station, McAllen-Brownsville and Houston at 18 percent each. A major hospital in Dallas has offered a $10,000 recruiting bonus to attract new staff RNs. Comparable vacancy rates for LVNs stand at 7.5 percent for hospital staff nurses and 8 percent for home health nurses.

The demand for new nurses continues to rise, despite record numbers of nurse licensures. Historically, nursing shortages have occurred on an almost cyclical basis, and have generally been associated with declines in supply. The current shortage, in contrast, arises from a rapidly increasing demand for nursing services. Of the 115,613 RNs with active Texas licenses in January 1990, 99,944 reside in and 78,971 work as nurses in Texas -- more than ever before. And still the demand for nurses continues to outrun increases in supply. The factors fueling this demand are complex and interrelated:

- increased overall demand for health care
- advancing technology
- new government regulations
- greater complexity of care
- the growing practice of "defensive medicine"
- tendency for hospital patients to be sicker and need more intensive care
- the AIDS epidemic
- new care alternatives (home health care, ambulatory care)
- aging of the population
- overall population growth

Almost 80 percent of the active RNs in Texas provide direct patient care in a clinical setting. State agencies, nursing homes, school districts, and industry compete with hospitals for RNs. The Texas Department of Corrections, for example, provides nursing services each month to 90,000 - 110,000 inmates who require attention. That agency currently has a 47 percent staff nurse vacancy rate. The emergence of RN positions at hotels and resorts is a new industry development. A San Antonio hotel recently advertised for an RN at the relatively high annual entry-level salary of $38,000.

A 1990 report to Congress from the Department of Health and Human Services predicts that demand for nurses will continue to exceed supply for the next 15 years. The Omnibus Reconciliation Act of 1987 (OBRA-87) contains massive nursing home reforms. It establishes the criteria that one RN must be available as a director of nursing for eight hours a day, seven days a week, and that one LVN must be present at all times. Previously, Texas nursing homes were only required to staff one RN director for four hours per week and one LVN for eight hours each day. It has been estimated that when the new law takes effect on October 1, 1990, more than 1,000 nursing homes in Texas will have to hire as many as 1,800 additional RNs. The status of the shortage in nursing homes is difficult to assess, however, because this sector is not routinely surveyed.

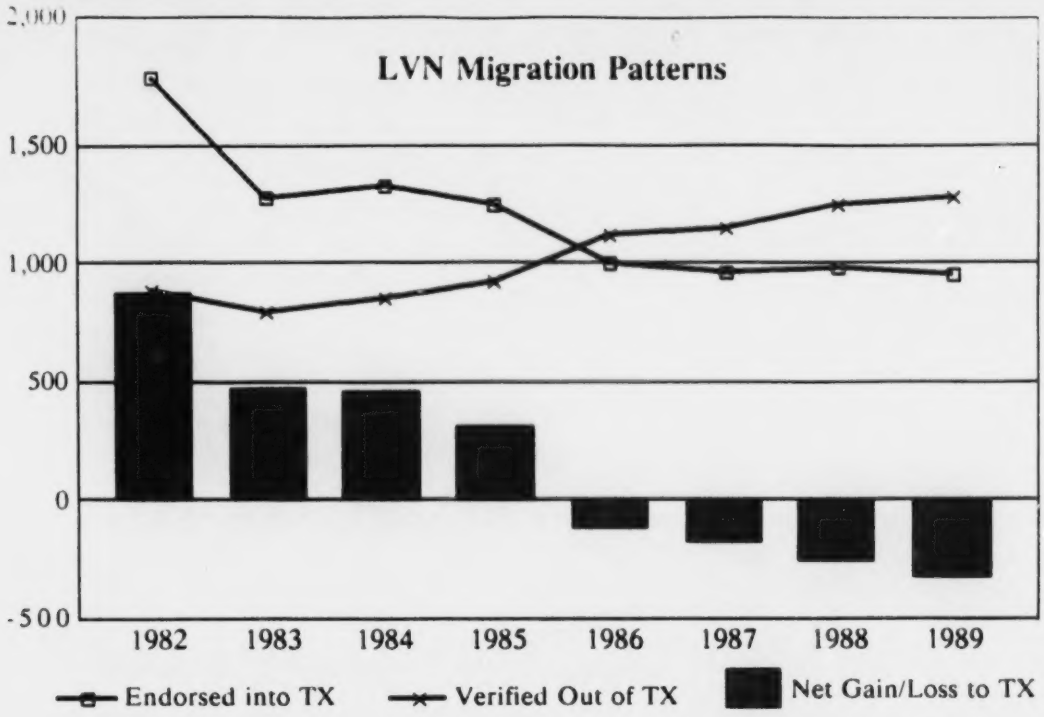
The economic slump in Texas has aggravated the shortage of nurses in the state. In the boom years of the early 1980s, a significant number of nurses came to Texas from other states, and few nurses left. As the economy faltered, the migration pattern has shifted dramatically from a total net in-migration of about 4,000 RNs and LVNs per year to an annual net out-migration of approximately 600 nurses. The economic downturn appears to be a major factor in making the Texas shortage among the worst in the nation.

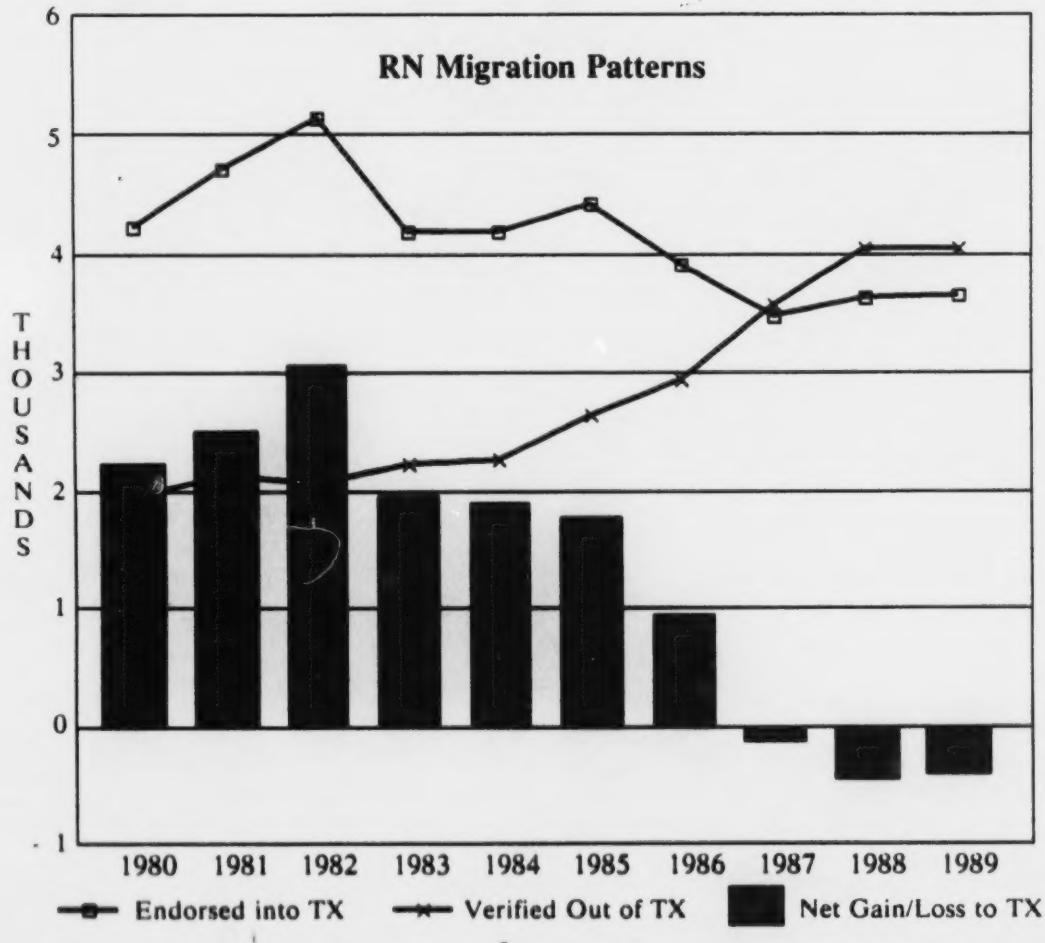
Texas Nursing Programs: The Best Source for More Licensed Nurses

The Texas Nurses Foundation calculates that **the current number of graduates must be doubled to keep pace with demand for RNs.** A 1988 study conducted by the foundation identified and considered the potential contributions of all possible methods to increase the number of licensed nurses in Texas (e.g., increasing the number of nurses migrating into Texas from other states, increasing the number of foreign nurses practicing in Texas, and reducing the number of nurses leaving Texas to practice in other states or leaving the nursing field). Given recent data on migration patterns and graduations, the continuing economic slump, U.S. immigration policies, and the small proportion of licensed nurses not working in nursing, the study concluded that the nursing education system in Texas is likely to be the only significant source of any increased supply of nurses.

If the Texas educational system is to be the mainstay of nurse supply in the face of escalating demand, three significant questions must be addressed:

- How and where should additional nurses be educated?
- Can enough students graduate to reduce the shortage?
- What resources are needed for programs to expand sufficiently?


LVN Migration Patterns
2,000
1,500
1,000
500
0
-500
1982
1983
1984
1985
1986
1987
1988
1989
Endorsed into TX
Verified Out of TX
Net Gain/Loss to TX


RN Migration Patterns
THOUSANDS
6
5
4
3
2
1
0
-1
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
Endorsed into TX
Verified Out of TX
Net Gain/Loss to TX

Student Enrollments and Graduations

Student enrollments, which had been declining, are now at an all-time high. For several years before the 1987-88 academic year, student enrollments lagged. Today, this trend has reversed, and many programs -- particularly LVN and ADN programs -- must turn away qualified applicants and keep long waiting lists. Additional gains in baccalaureate enrollments, however, are still needed.

In fall 1989, LVN programs turned away 2,500 qualified applicants, and 1,375 qualified applicants were placed on waiting lists for entry-level RN programs in Texas. There are indications that more than 2,000 qualified applicants will be turned away from entry-level RN programs in fall 1990. Advanced MSN programs are also operating at capacity.

LVN Programs in Texas by Setting

Universities (1 private, 1 public)	2
Community Colleges/Texas State Technical Institites	84
Proprietary Schools	2
Hospitals	11
Military	1
Total LVN	100

Texas nurse education programs need additional resources to expand enrollments. During 1987 and 1988, enrollments in RN programs exceeded formula base period 1986 enrollments by 19 percent. In 1989, enrollments surged 7 percent above those in formula base period 1988. Program directors consistently report that their resources are now strained to the breaking point, and that further enrollment increases are impossible without additional resources, especially faculty, clinical space and classroom space.

RN Programs in Texas by Type and Setting

(Numbers in parentheses indicate extended campuses.)

Program Type	Hospital	Public Community College	Public University	Independent Senior College	Health Science Center	Total
Diploma	2	---	---	---	---	2 (0)
ADN	---	35 (10)	6	3	---	44 (10)
BSN*	---	---	13 (8)	8 (2)	4 (2)	25 (10)
Entry MSN	---	---	1	---	---	1 (0)
Advanced MSN	---	---	7 (2)	1	4	12 (2)
PhD	---	---	2 (2)	---	1 (1)**	3 (3)
All Types -RN	2	35 (10)	29 (12)	12 (2)	9 (3)	87 (27)

* Includes four RN/BSN programs.
** Not yet implemented.

The Nursing Faculty Shortage

Minimum standards for nursing education programs are established by the Board of Nurse Examiners and Board of Vocational Nurse Examiners as part of their charge to protect the health, safety, and welfare of people in Texas. In clinical settings, the Board of Vocational Nurse Examiners' standard for the faculty-student ratio is 1:15, and the Board of Nurse Examiners' standard is 1:12.Many nurse educators consider these ratios to be approaching dangerously high

levels, since today's patients require more intensive care. **Because most programs are already operating at the maximum limit, increasing enrollments significantly would require the addition of faculty.**

Minimum faculty qualifications are also specified by the nurse licensing boards (see appendix). When qualified faculty members cannot be hired, RN program directors can petition the Board for a waiver of qualifications. An almost fourfold increase in these petitions in recent years demonstrates the severity of the faculty shortage. Last year 40 such petitions were filed for RN programs. The problem is generally seen all across the state, but is particularly troublesome in West Texas and in the Houston-Galveston area. Many LVN programs are also having difficulty recruiting faculty.

Some factors thought to contribute to the faculty shortage are:

- increased demand for master's and doctorally-prepared nurses in clinical agencies, where higher salaries exist;
- infrequent and small salary increases in academic settings;
- higher stress levels and heavy workloads among faculty, associated particularly with clinical supervision requirements.

Current graduate programs will not produce enough graduates to relieve the faculty shortage significantly. Almost 70 percent of graduate students are enrolled part-time and will take longer to graduate. It is also estimated that less than 25 percent of these students plan to teach in nursing programs.

"Only 6.28 percent of licensed RNs working in Texas have masters degrees and less than 1 percent have doctorates. This small percentage of nurses with advanced degrees is a contributing factor to the current nursing faculty shortage."

"The [relatively small] number of enrollees in Baccalaureate Nursing Programs is especially troublesome because this is the source of nurses who will seek higher degrees in nursing and ultimately leadership positions. Currently, clinical agencies and schools of nursing are vying for nurses with advanced degrees to assume teaching, administrative, and other leadership roles." (Board of Nurse Examiners, 1990)

Educational Mobility and the Shortage

The best short-term response to the nursing shortage is to increase the number of new RNs as quickly as possible. The pool of 65,590 working and 13,212 non-working LVNs now in Texas is a rich student resource for RN education. Because of their previous education and experience, LVNs can sit for RN licensure after completing special 12- to 15-month ADN programs, or two-year or longer BSN programs. In the fall of 1989, 11 percent of the students enrolled in RN preparatory programs were LVNs working to advance. It is also very important that diploma and Associate Degree Nursing graduates have opportunities to earn the BSN. In the fall of 1989, 21 percent of the students enrolled in BSN programs were diploma or ADN program graduates who are already-licensed RNs.

Nursing programs offer a wide variety of procedures for enhancing educational mobility, with no regional or statewide uniformity apparent. Options tend to be directly related to program and institutional philosophy. Three general methods for recognizing prior education and work experience are commonly used:

- challenge procedures, with course credit awarded based upon acceptable performance on written and/or laboratory examinations covering either nursing or general education courses;
- special transition or bridging course offerings which compress the amount of time spent covering a particular body of content with which the student is already somewhat familiar; and
- transfer of coursework from another institution (usually limited to general education courses).

While the lack of financial resources is the most significant barrier to educational mobility for nurses, problems of progression between programs or transfer of credits from program to program also exist. Curricular and procedural changes are still needed to make sure nursing students can enroll in other types of nursing programs and can progress through those programs without unnecessary delays and costs caused by duplicative learning requirements.

Nursing Students: A Changing Population

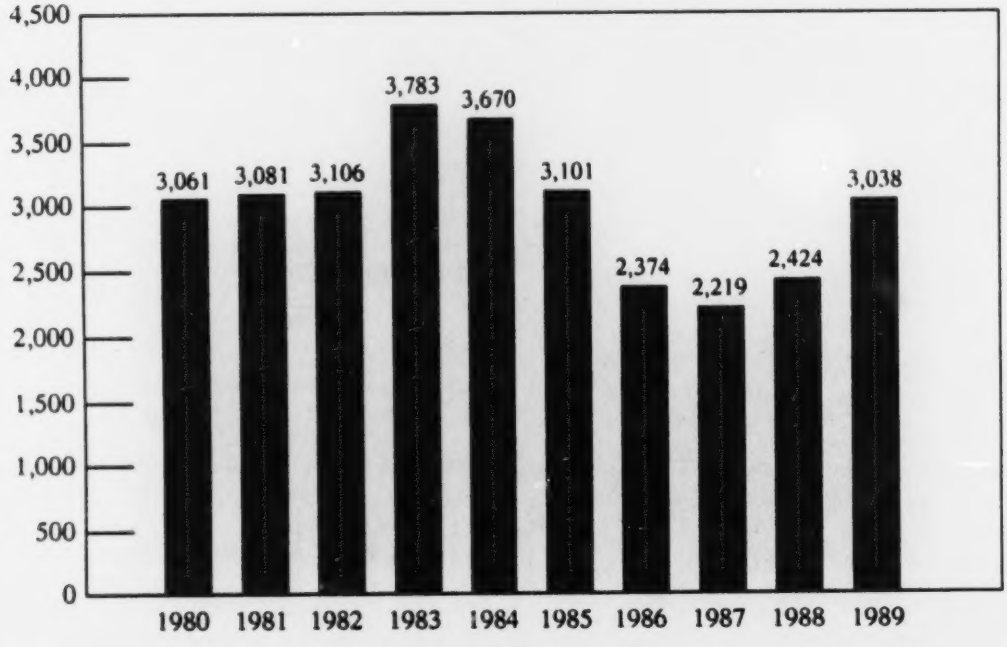
Today's nursing students tend to be older women with families. These women usually have been in the workforce for some time. Many are heads of households, many are starting a second career, and many are seeking to enhance their positions and incomes by completing additional degrees. For these students, a continuing income is essential while they are in school. At the same time, many are denied financial aid because they earn income from jobs they cannot give up or because they are earning second degrees.

Second-career, nontraditional nursing students, especially those with family responsibilities, have a number of special needs, such as:

- substantial financial aid to supplement or replace employment income;
- "earn-while-you-learn" programs;
- flexible class schedules including evening and weekend offerings;
- classes taught at or very near the workplace; and
- free or subsidized child care.

In contrast to the traditional pattern of college attendance between the ages of 18 and 22, several recent surveys indicate that the average age for LVN, diploma, and ADN students (by far the most numerous group) is more than 30. Even BSN students, who more closely resemble the traditional college population, have an average age in the mid-twenties and are likely to be employed while attending school.

Estimated LVN Graduations 1980-1989
(Number of First-Time Licensure Examination Candidates)



Source: Board of Vocational Nurse Examiners

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Recommendations of the Nursing Study Committee

Hospitals and other clinical employers, state government, and nursing programs must coordinate their efforts to solve the nursing shortage. The higher education sector cannot remedy the nursing shortage by itself. In keeping with the legislative charge to the Texas Higher Education Coordinating Board, the following recommendations by the Nursing Study Committee primarily concern approaches within the Texas system of higher education.

A number of other studies address beneficial changes which can be made in other sectors. For example, the 1989 Commonwealth Fund study, *What to Do About the Nursing Shortage*, suggests that hospitals, as the employers of two-thirds of all RNs, could help relieve the shortage by making hospital nursing more attractive and using nursing and other personnel more efficiently. References to this and selected other studies that were considered by the Nursing Study Committee and staff in preparing this report are listed in an appendix.

Recommendations to the Legislature

(1) That public and private, master's degree and entry-level, registered nursing programs be given additional state funds to increase graduations.

While the nursing shortage threatens health care across the state, it is estimated that in excess of 2,000 qualified applicants will have to be turned away from Texas RN nursing education programs in fall 1990. Although many programs are approaching their limits of growth after responding to an unprecedented upsurge in student demand over the past three years, survey results indicate that programs could expand if additional resources were made available.

An appropriation of $28 million would allow public and private diploma, ADN, BSN, and MSN programs in good standing with the Board of Nurse Examiners and the Coordinating Board increase the number of first-time enrollments in programs at the clinical and MSN training levels. Public programs would be fully-funded via formula to sustain the higher headcount enrollments beyond the biennium. Private programs would have to depend on other sources to support the enrollment increase after the first year of the biennium. Funds could be used for such items as adding faculty, establishing satellite/outreach programs, or adopting new instructional technologies. This assistance should help to resolve the shortage of nurses and to provide additional nursing faculty.

$25.2 million would be trusteed to the Coordinating Board to allocate to public community colleges and general academic institutions during both years of the 1992-93 biennium to increase first-time enrollments by 2,400 students. An additional $2.8 million would give one- time assistance to private educational institutions during the first year of the biennium to fund the enrollment of 200 additional nursing students. Funds would be allocated to each educational institution on a capitation basis at $7,000 per capita for enrollment increases.

The requested funds would be allocated on the basis of institutional certification of enrollment increases. Funding would also be contingent upon: (1) the availability of clinical positions commensurate to the enrollment increases, and (2) commitment from the institution, where applicable, that the nursing program would receive monies at or above the level of funding generated by the nursing formula.

Special Note: Nursing programs in health science centers, which should come under formula funding for the first time in fiscal year 1992, have been provisionally excluded from participation in the program described above. Assuming full funding for the formula, these programs would receive an increase in funding of approximately $9.8 million over the biennium, which should be adequate to support substantial enrollment increases. **If nursing programs in health science centers are not placed on full formula funding beginning in fiscal year 1992, participation in this capitation grant program should be extended to health science centers.**

Proposed Additions of New Nurses -- Appropriations Required and Numbers of New Nurses

	1990		1993		For Biennium	
	Dollar Gain	Student Gain	Dollar Gain	Student Gain	Dollar Gain	Student Gain
Health Science Center Programs	$4.5 M	100	$5.3 M	0	$9.8 M	100
Public University Programs	$3.5 M	500	$7.0 M	500	$10.5M	1,000
Public Junior College Programs	$4.9 M	700	$9.8 M	700	$14.7M	1,400
Independent University Programs	$1.4 M	200	$1.4 M	0	$2.8 M	200
TOTALS						
Formula	$4.5 M	100	$5.3 M	0	$9.8 M	---
Capitation	$9.8M	1,400	$18.2 M	1,200	$28.0M	---
New enrolled nurses		1,500		1,200		2,700

Key: Increment under formula; $7,000 increment per student from Incentive Pool Trusteed to the Coordinating Board

(2) That all formulas supporting nurse education be fully funded.

Adoption and full funding of all formulas which support nurse education in publicly-funded institutions is necessary to bring nursing faculty salaries into a minimally-competitive range with those in other states and in service settings.

Low salary is a serious problem in nursing faculty recruitment and retention nationwide. With the economic slump in Texas, the problem is particularly acute. More and more existing and potential nursing program faculty are being recruited for higher-paying positions in other states or in service settings. Two recent studies by the Coordinating Board show that nursing faculty salaries are lower in Texas than in the ten states with populations nearest to that of Texas. In the service sector, where base salaries are already higher than nursing faculty salaries, nurses with advanced degrees are being offered guaranteed annual salary increases of up to five percent, huge recruitment or annual bonuses, and other attractive benefits. The ability of Texas nursing programs to recruit and retain qualified faculty will continue to decline unless salaries and benefits are enhanced to competitive levels.

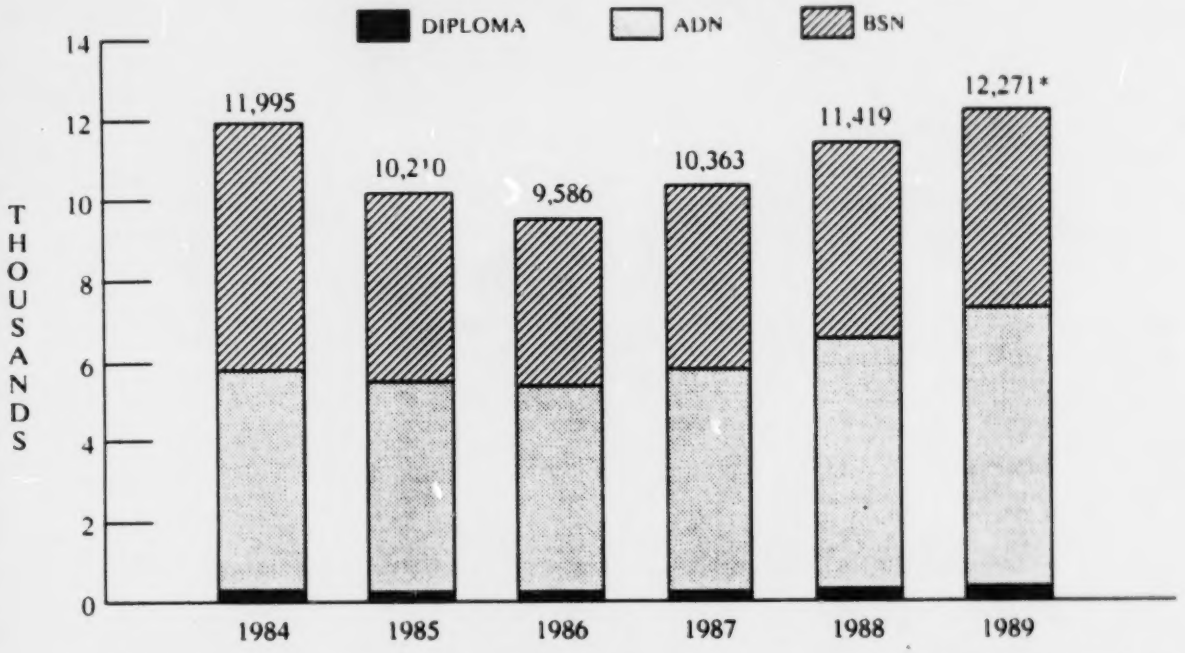
(3) That an educational loan repayment program be funded for graduate-prepared nurses who serve as faculty or as advanced nurse practitioners in underserved areas of the state.

Texas has a severe shortage of graduate-prepared RNs working as faculty in nursing education programs and as advanced nurse practitioners. (Clinical specialists, nurse anesthetists, nurse midwives, and nurse practitioners all fall under the general title of advanced nurse practitioners.) Only six percent of licensed RNs in Texas have master's degrees, and less than one percent have doctorates. An educational loan repayment program should help attract into the state and retain graduate-prepared nurses in these critically-needed positions. It should also encourage additional Texas students to prepare for and practice in these capacities in the state.

The Coordinating Board is already empowered by Section 61.654 of the Texas Education Code to offer such a loan repayment program. An additional annual appropriation of $1.4 million could be used to help retire the

Enrollments in Schools of Nursing

Preparing Individuals for Initial R.N. Licensures

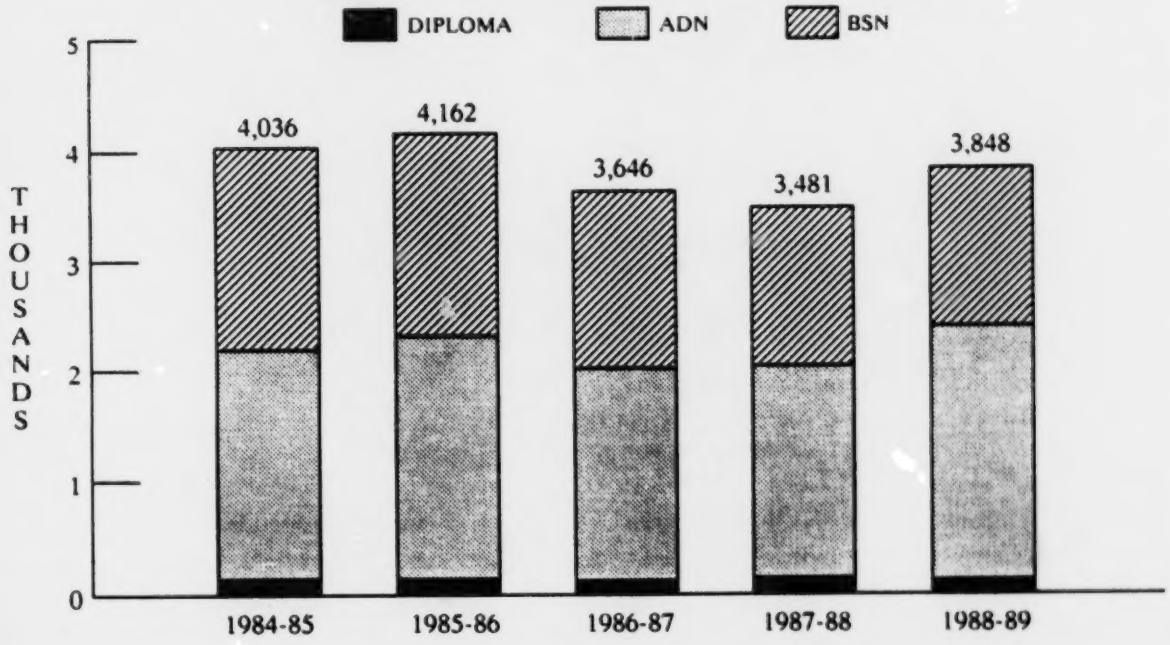


*Entry-level master's included with baccalaureate

Source: Board of Nurse Examiners

Graduations from Schools of Nursing

Preparing Individuals for Initial R.N. Licensures



educational loans of approximately 200 participating nurses each year.

After completing an MSN or a higher nursing degree, a Texas resident or out-of-state RN who serves as faculty in registered nursing education programs or who serves as an advanced nurse practitioner in an underserved area in Texas on a full-time basis could receive educational loan repayment assistance of $7,000 per year up to a maximum of $39,000. A grant could not be used to repay a loan which was in default at the time of the nurse's application.

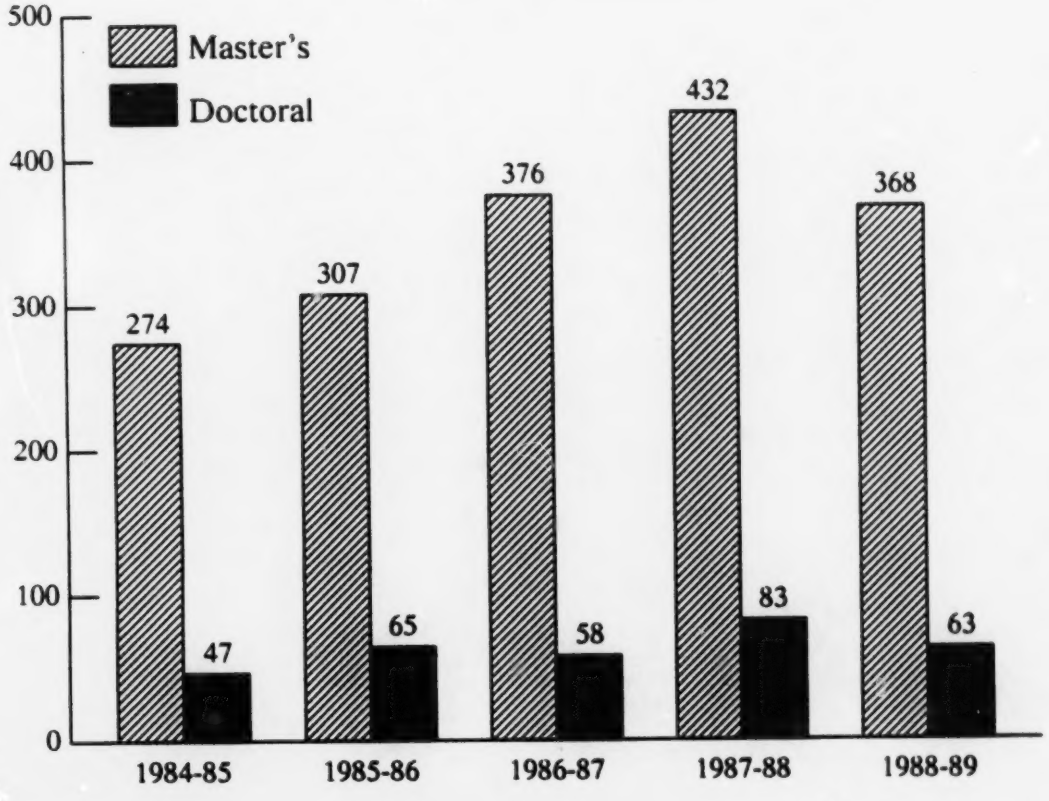
(4) That nurse practitioner programs be expanded with additional state funds.

An additional appropriation of $1 million in state funds would allow programs to graduate 70 more MSN-prepared advanced nurse practitioners by 1993. The term "nurse practitioner" is used here in the narrow sense and is not intended to include clinical specialists, nurse anesthetists, or nurse midwives. Rather, these funds would be used for the preparation of nurses who provide health care in underserved areas. Successful implementation of the Rural Health Clinic Act incorporated in H.B. 18 will depend in part on the availability of sufficient numbers of prepared nurse practitioners willing to work in underserved areas of the state. An estimated 2,800 additional nurse practitioners will be needed to fulfill the mandates of H.B. 18.

The Coordinating Board would determine which programs -- among those meeting federal and professional

Master's and Doctoral Degrees Conferred in Nursing

1984-85 to 1988-89



Source: Texas Higher Education Coordinating Board

program education standards -- are best able to train additional nurse practitioners. Capitation awards of $7,000 per year for up to two years would be given for each full-time student who enters an MSN nurse practitioner program in fall 1991 under the provisions of this program.

(5) That additional state funds be given to the Health Professions Resource Center of the Texas Department of Health to develop a statistical model to predict the supply of nurses and the demand for nursing services.

In H.B. 18, the 71st Legislature created the Health Professions Resource Center (HPRC) of the Texas Department of Health to acquire and disseminate data on health professions demonstrating an acute shortage. Additional annual funding of $250,000 would give the HPRC the capability to develop and use a statistical model to project nurse supply and demand. The projections would be used by health policy planners in various agencies and organizations to help anticipate and avert future nursing shortages and otherwise respond to changing health care needs in the state. Many of the basic data elements for the model (e.g., demographic and economic indicators) could also be used with similar models to make projections on those allied health disciplines which are also in shortage.

To help develop and use the statistical model, the HPRC should establish an advisory consortium with representatives from key Texas public and private agencies that collect, analyze, or use nursing data. Consortium members would provide advice to HPRC on appropriate assumptions, data sources, and so forth, and would contribute data to a comprehensive nursing data base to be maintained at HPRC.

Recommendations to the Coordinating Board

(6) That eight Regional Nursing Councils and a Texas Nursing Council be formed to promote educational mobility and collaborative uses of resources among different nursing programs and health care entities.

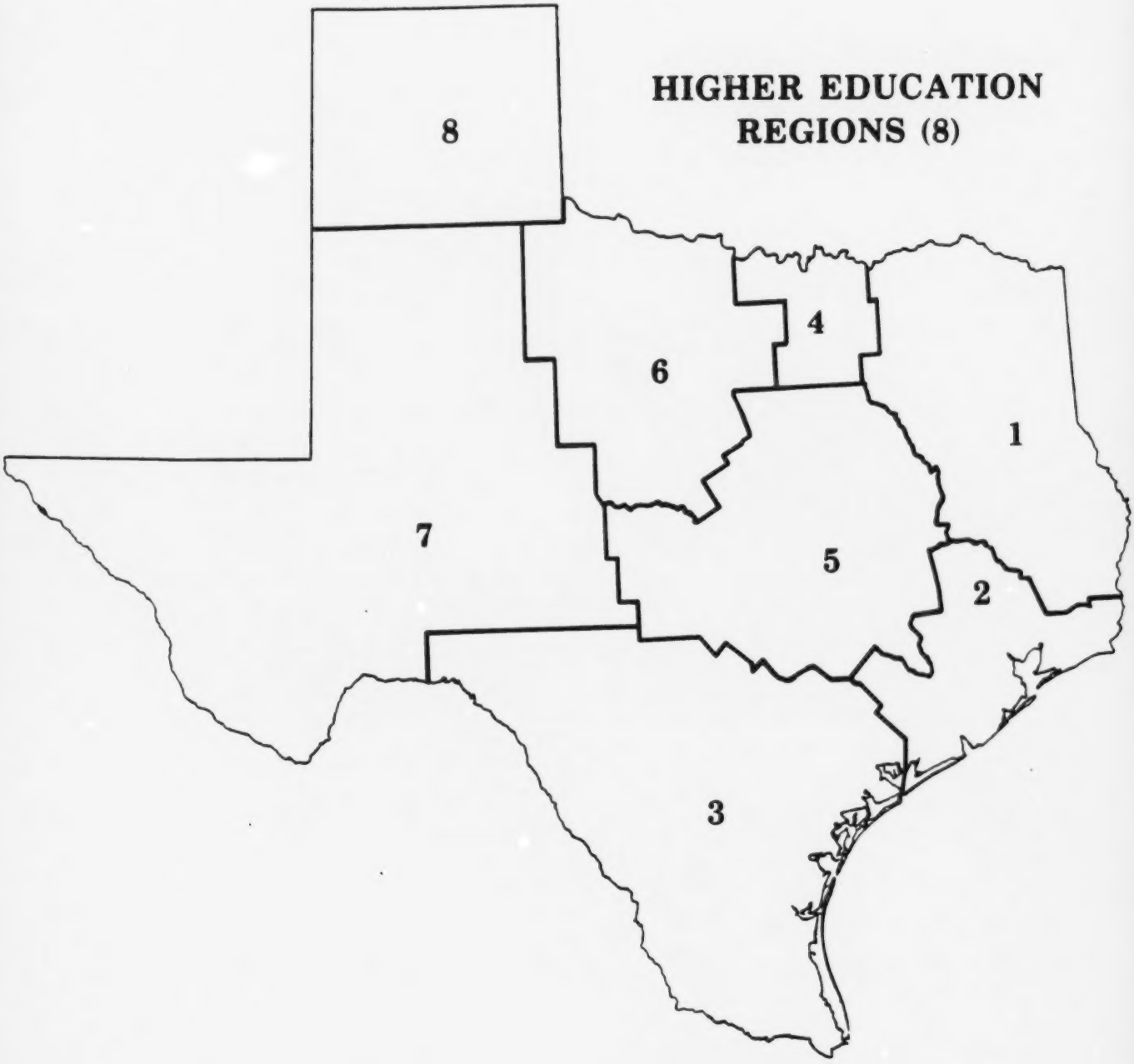
Statewide and regional planning and cooperation are necessary for maximum return to the state for the expenditure of scarce nursing education resources and to ensure that educational mobility is promoted within and across institutions of higher education.

Eight Regional Nursing Councils would:

- be composed of regional representatives of higher education institutions and other appropriate health care agencies and associations, with regional boundaries defined as they are for the existing eight higher education regions
- encourage collaborative use of resources and facilitate student educational mobility;
- evaluate existing graduate nursing education collaborative efforts supporting the production of nursing faculty and nurse clinicians;
- provide annual reports on their activities, findings, and recommendations to the Texas Nursing Council; and
- work cooperatively with other regional planning committees, including the Quality Workforce Planning Committees and the Regional Higher Education Councils, as defined in Coordinating Board rules.

The Texas Nursing Council would:

- be composed of representatives from the Coordinating Board, Board of Vocational Nurse Examiners, Board of Nurse Examiners, and each of the eight Regional Nursing Councils;
- help the Coordinating Board develop and maintain a statewide master plan for nursing education;
- hold meetings at least annually and provide an annual report on its activities, findings, and recommendations to the Coordinating Board, Board of Nurse Examiners, Board of Vocational Nurse Examiners, and other appropriate groups;
- work cooperatively with other planning committees, including the Quality Workforce Planning Committees and the Regional Higher Education Councils, as defined in Coordinating Board rules; and
- function as a clearinghouse for information about new technology and nursing curriculum products capable of increasing student retention rates, increasing cost-effectiveness, or improving student access to and progression through nursing education programs.


HIGHER EDUCATION
REGIONS (8)
8
4
6
1
7
5
2
3

(7) That each nursing program be required to define a reasonable procedure for promoting educational mobility.

While the lack of financial resources is the most significant barrier to educational mobility for nurses, students at times also face problems progressing between programs or have problems transferring credits from program to program. Some curricular and procedural changes are needed to ensure that the educational mobility of nursing students is not impeded by unnecessary delays or costs arising from duplicative learning requirements.

The Coordinating Board, with the assistance of the newly-formed Texas Nursing Council (Recommendation 6) and Joint Curriculum Advisory Committee (Recommendation 10), must see that student educational mobility is expedited within and among institutions of higher education.

- General education courses for nursing programs (i.e., social and behavioral sciences, humanities and fine arts, and math and natural sciences) should, to the extent possible, be comparable and transferable among post-secondary institutions throughout the state.

- Each nursing program must be required to define a reasonable procedure for promoting educational mobility in nursing courses.

(8) That a program of recognition for exemplary nursing education programs be sponsored.

Beginning in academic year 1991, the Coordinating Board should sponsor a program to recognize exemplary nursing education programs, in order to encourage the adoption of effective educational practices in programs all across the state. The programs might receive extensive publicity in the *CB Report* and the *Annual Status Report* as well as in external publications and other media. Financial awards should also be considered. The newly-formed Texas Nursing Council, with the assistance of educational program evaluation specialists, would develop specific criteria for recognition, such as student retention rate, innovation, and cost-effectiveness.

(9) That scarce nursing education resources be conserved by:

- **evaluating the effectiveness of existing programs and options before new programs are established;**
- **requiring evidence of regional collaboration in the development of new programs; and**
- **encouraging satellite/outreach programs for educationally-underserved areas of the state before establishing new programs.**

Adding any nursing programs must be very carefully considered, and efficient use of resources must be encouraged. Nursing programs exist in all areas of Texas with a population of at least 50,000. Vocational nursing programs are even more widely placed in the state, leaving only a few sparsely-populated areas without a program. Outreach programs delivered by accredited programs can deliver quality education on a short-term basis to unserved and underserved geographic areas of the state.

Recommendations to the Board of Nurse Examiners and the Board of Vocational Nurse Examiners

(10) That the Board of Nurse Examiners and the Board of Vocational Nurse Examiners adopt essential competencies to be required of graduates from each type of entry-level nursing program.

In cooperation with the Coordinating Board, the Boards of Nurse Examiners and Vocational Nurse Examiners should immediately appoint a Joint Curriculum Advisory Committee to recommend essential competencies to be required of graduates from each type of entry-level nursing program.

- The committee should include representatives from the Board of Nurse Examiners, the Board of Vocational Nurse Examiners, the Coordinating Board, the Texas Education Agency, nurse educators from each

educational level, and health care agencies.

- Successive levels of nursing must be defined by the general education and nursing competencies required, with each level building on the preceding level.
- A procedure must be established for the periodic review of these competencies as they relate to current nursing practice.
- The Board of Nurse Examiners and the Board of Vocational Nurse Examiners should adopt and implement these essential competencies as part of program accreditation requirements.
- Recommendations should be developed for using the essential competencies as the basis for transferring nursing course credits among programs.
- Reasonable procedures for assessing prior learning and work experience should be defined.
- All institutions offering LVN programs must provide an option that offers general education courses which will meet transfer requirements without unnecessarily increasing the length of the program.

(11) That the Board of Nurse Examiners and the Board of Vocational Nurse Examiners collect standardized licensure data (including demographic, educational, and employment characteristics of RNs and LVNs in Texas) using quality control procedures.

It is critical that valid, consistent, complete, and reliable information be available for nurse manpower planning. The most important sources of such data in Texas are the applications for new and continued licensing used by the two boards. Both boards have identified areas in which improvements could be made if adequate resources were available.

(10) That the Board of Nurse Examiners and the Board of Vocational Nurse Examiners update biannually and disseminate *Nursing Programs in Texas*, a fact book on nursing programs developed in prototype form by the Nursing Study Committee, as a tool for recruiting and advising.

A single, comprehensive, and authoritative source of information on nursing programs is essential to inform and recruit students and others who want to advance in nursing careers. The two licensing boards are the appropriate agencies to maintain and distribute a document of this type on a continuing basis.

Recommendations to Colleges and Universities

To prevent a worsening of the present crisis, the Nursing Study Committee recommends that higher education institutions:

(13) Ensure that nursing programs receive funds at or above the level generated by the nursing formula for at least the next five years.

(14) Ensure that faculty salaries and benefits are reasonably competitive with those in the clinical practice sector.

(15) Seek faculty position endowments from external sources rather than year-to- year salary augmentations.

(16) Make funds available for faculty professional development.

(17) Fund orientation and mentoring programs for inexperienced nursing faculty.

(18) Make special efforts to recruit students into BSN and MSN programs.

(19) Offer all required courses every semester for the duration of the nursing shortage crisis, whenever possible.

(20) Schedule nursing classes and clinical experiences to make optimal use of available classrooms, laboratory space, and clinical facilities.

(21) Help increase student retention by:

- Providing additional resources to meet student needs for tutoring and remedial assistance;
- Developing partnerships with industry to provide additional sources of financial assistance for students; and
- Providing student support systems including health clinics, counselors, and day care services.

Appendices

Appendix A

Texas Higher Education Coordinating Board
Nursing Study Committee

Members:

Chandler R. Lindsley
Committee Chair

E. Dean Gage
Texas A&M University
Committee Vice-chair

Karen G. Barnes
Harris Methodist Hospital
Representing: Texas League for Nursing

Helen Bush
Texas Woman's University
Representing: Graduate Nursing Education

Dorothy Chesley
Texas Board of Nurse Examiners
Representing: Texas Board of Nurse Examiners

Dorothy Curtino
Cooke County College
Representing: Deans and Directors of Nursing Programs

Joe Dougherty
Representing: Texas Medical Association

Joy Fleming
Texas Board of Vocational Nurse Examiners
Representing: Texas Board of Vocational Nurse Examiners

Blanca Rosa Garcia
Del Mar College
Representing: ADN Education

Sue Ann Hicks
Amarillo College
Representing: Texas Association of Vocational Nurse Educators

Clair Jordan
Texas Nurses Association
Representing: Texas Nurses Association

Carolyn Parker
Licensed Vocational Nurses Association of Texas
Representing: Licensed Vocational Nurses Association of Texas

Paula Mitchell
El Paso Community College District
Representing: LVN Education

Maria Norton
McKenna Memorial Hospital
Representing: Texas Organization of Nurse Executives

Bonnie Saucier
Midwestern State University
Representing: BSN Education

Doris Sinclair
Baptist Memorial Hospital System
Representing: Diploma Nursing Education

Gail Snyder
Austin Community College
Representing: Texas Association for the Advancement of Associate Degree Nursing

Ex-officio Committee Members:

Billye Brown
The University of Texas at Austin
Representing: The Coordinating Board's Health Professions Education Advisory Committee

Helen Cox
Texas Tech University Health Sciences Center
Representing: Health Science Centers

Karleen Kerfoot
St. Luke's Episcopal Hospital
Representing: Southern area

Doris Riemen
The University of Texas at Tyler
Representing: Eastern area

Study Staff, Texas Higher Education Coordinating Board:

Study Director
Yvonne N. Newman

Associate Study Director
Carrie Nelson

Consultant
Lee Poynor

Liaisons to Nursing Study Committee:

Robin Roberts
Texas Employment Commission

Diane L. Faucher
Texas Department of Mental Health and Mental Retardation

Dan McCullough
Texas Department of Human Services

Sunny M. Thomas
Texas Education Agency

Linda Linville
Texas Department of Health

Joan Davis
Texas Department of Corrections

cis capitol information service

Enrolled

5/10/89
By McDonald

HCR 92

HOUSE CONCURRENT RESOLUTION

WHEREAS, There are four types of educational programs for the preparation of nurses that vary in length from one to four years and each of which results in a different type of credential or degree; and

WHEREAS, Career mobility for nurses is enhanced by their being able to advance easily from one program to another; and

WHEREAS, The Special Committee on Post-Secondary Medical, Dental, and Allied Health Education, a special interim study committee established by the 70th Legislature, recommended that:

(1) schools of nursing collaborate in providing structures for articulation among different types of nursing programs; and

(2) the Texas Higher Education Coordinating Board, Board of Nurse Examiners, and Board of Vocational Nurse Examiners should assure policies and procedures that promote the development of additional opportunities for program articulation among different types of nursing education programs, and

WHEREAS, The Special Committee on Post-Secondary Medical, Dental, and Allied Health Education recommended that schools of nursing having similar missions or geographic proximity be encouraged to collaborate in the development and operation of their programs to assure students' access to the full range of nursing education programs, and

WHEREAS The Special Committee on Post-Secondary Medical

Dental, and Allied Health Education recommended that the coordinating board provide the legislature with a report on the nursing shortage, including recommendations, now, therefore, be it

RESOLVED, That the 71st Legislature of the State of Texas direct the coordinating board to study all issues and concerns relating to:

(1) the nursing shortage;

(2) career mobility among the various nursing programs; and

(3) collaboration among schools in geographical proximity; and, be it further

RESOLVED, That the study may include but shall not be limited to determining the size of the pool of licensed vocational nurses available to advance into associate degree programs, the feasibility of developing model career mobility programs, the grouping of schools of nursing regionally to promote articulation among types of programs and students' access to the full range of nursing programs, the use of competency testing as a basis for recognizing educational and work experience of licensed vocational nurses and allied health providers, mechanisms for nonbaccalaureate students to be enrolled in master level programs, the standardization of conferring of credits and standardization of challenge exams, ways to assure an adequate supply of qualified faculty, and the utilization of demonstration projects, if feasible, to assist the study, and, be it further

RESOLVED, That the coordinating board, in conducting the study, have all powers and duties provided to special committees by

BEST COPY AVAILABLE

the senate and house rules of procedure, by Chapter 301, Government Code, and by policies of the committees on administration; and, be it further

RESOLVED, That the coordinating board appoint a special advisory committee to advise and otherwise assist it in conducting the study; and, be it further

RESOLVED, That the advisory committee be a 16-member committee consisting of a chair named by the coordinating board and the following members who are not to serve in dual roles: one representative named by the Texas Nurses Association, one representative named by the Texas Organization of Nurse Executives, one representative named by the Board of Nurse Examiners, one representative named by the Board of Vocational Nurse Examiners, one representative named by the Licensed Vocational Nurses Association of Texas, one representative named by the Texas League for Nursing, one representative named by the deans and directors of nursing programs, one representative named by the Texas Organization for the Advancement of Associate Degree Nursing, one representative named by the Texas Association of Vocational Nurse Educators, one representative named by the Texas Medical Association, a head of each of the four types of nursing education programs to be named by the coordinating board, and a representative of graduate nursing education named by the coordinating board; and, be it further

RESOLVED, That the costs of the committee be borne by the coordinating board except that the costs associated with the participation on the advisory committee of members representing

particular organizations or agencies shall be borne by that member or the organization or agency represented; and, be it further

RESOLVED, That the coordinating board be authorized to request the assistance, where needed in the discharge of its duties, of the Board of Nurse Examiners, the Board of Vocational Nurse Examiners, the Texas Department of Health, and other agencies, departments, and public educational institutions and that it be the duty of such agencies, departments, and institutions to assist the coordinating board in its study when requested to do so; and, be it further

RESOLVED, That the coordinating board make a complete report, including findings and recommendations and drafts of any legislation considered necessary, to the lieutenant governor and speaker of the house by October 1, 1990.

McDonald

Appendix C

Selected References

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Appendix D

Minimum Faculty Qualifications For Entry-Level RN Programs

Diploma and ADN Program Faculty

- current Texas RN licensure
- sufficient, relevant clinical experience
- master's degree in nursing (preferred)

- or -

a bachelor's degree in nursing, plus
a master's degree in another subject, plus
a minimum of six hours of graduate-level nursing coursework relevant to the teaching position held

BSN and Entry-Level MSN Program Faculty

- current Texas RN licensure
- sufficient, relevant clinical experience
- master's degree in nursing (preferred)

- or -

a bachelor's degree in nursing, plus
a master's degree in another subject, plus
a minimum of 12 hours of graduate-level nursing coursework relevant to the teaching position to be held

Source: Board of Nurse Examiners

Minimum Faculty Qualifications For LVN Programs

- current Texas nurse licensure
  active employment in nursing for the past three years
  (advanced preparation in nursing, education, and nursing administration may substitute)
- three years of varied nursing experience since graduation

There are additional qualifications for program directors.

Source: Board of Vocational Nurse Examiners

Appendix E

Master's Degrees Conferred in Nursing
Texas Public Institutions
1984-85 to 1988-89

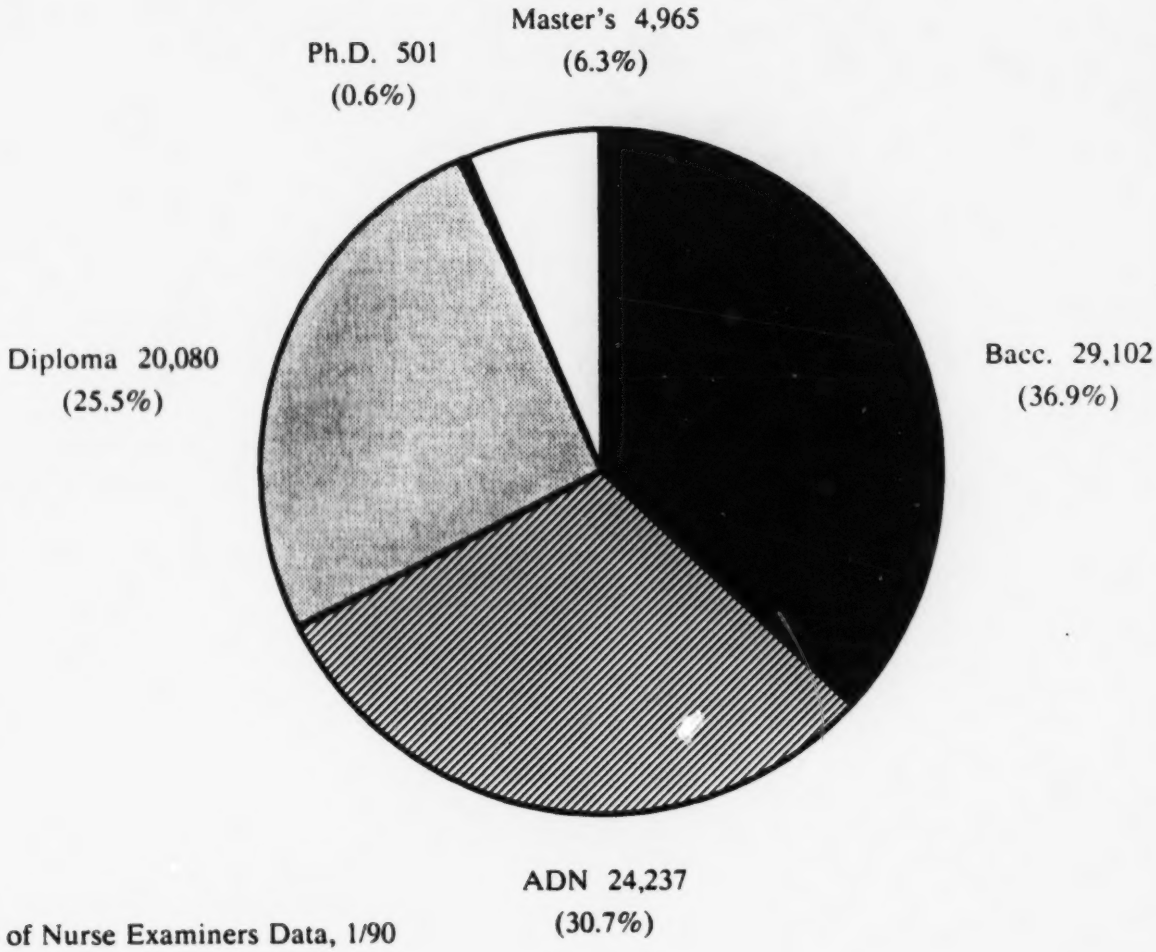
	1984-85	1985-86	1986-87	1987-88	1988-89
Corpus Christi State University	14	11	6	10	12
Texas Tech University Health Sciences Center	0	0	0	0	0
Texas Woman's University	68	68	77	179	103
The University of Texas at Arlington	34	58	66	52	50
The University of Texas at Austin	47	43	53	32	31
The University of Texas at El Paso	25	29	20	29	22
The University of Texas at Tyler	0	0	0	0	0
The University of Texas Health Science Center at Houston	19	21	45	34	40
The University of Texas Health Science Center at San Antonio	45	57	62	55	51
The University of Texas Medical Branch at Galveston	16	12	35	22	36
West Texas State University	6	8	12	5	13
Total	274	307	376	418	358

Doctoral Degrees Conferred in Nursing
Texas Public Institutions
1984-85 to 1988-89

	1984-85	1985-86	1986-87	1987-88	1988-89
Texas Woman's University	19	23	15	30	19
The University of Texas at Austin	28	42	43	53	44
Total	47	65	58	83	63

Appendix F

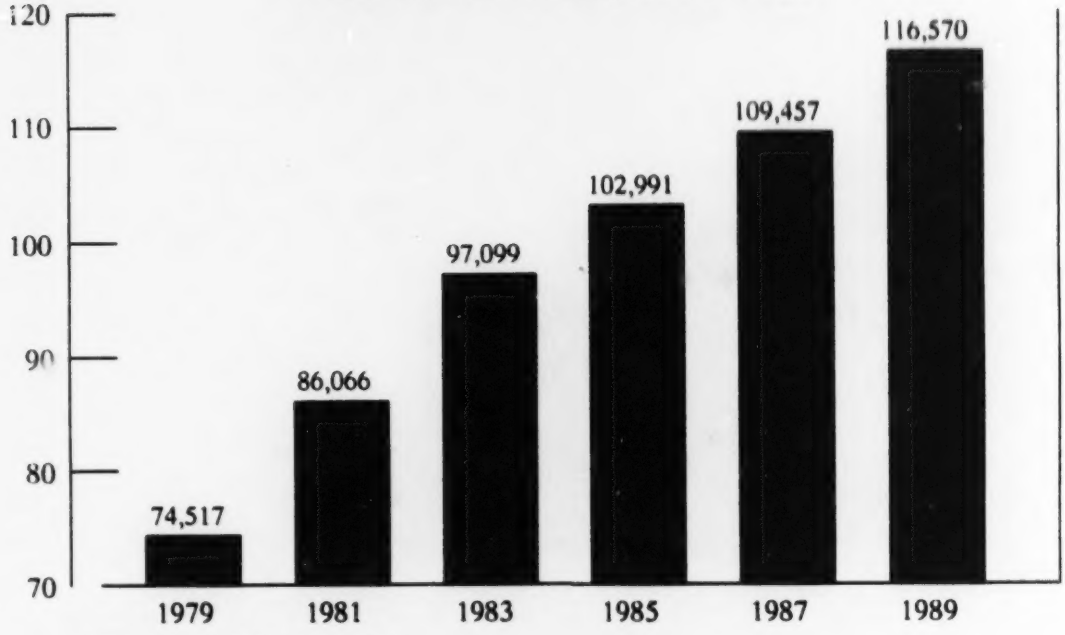
Texas RNs Employed in Nursing By Highest Degree



Board of Nurse Examiners Data, 1/90

Appendix G

Number of Registered Nurses Licensed in Texas, 1979-1989

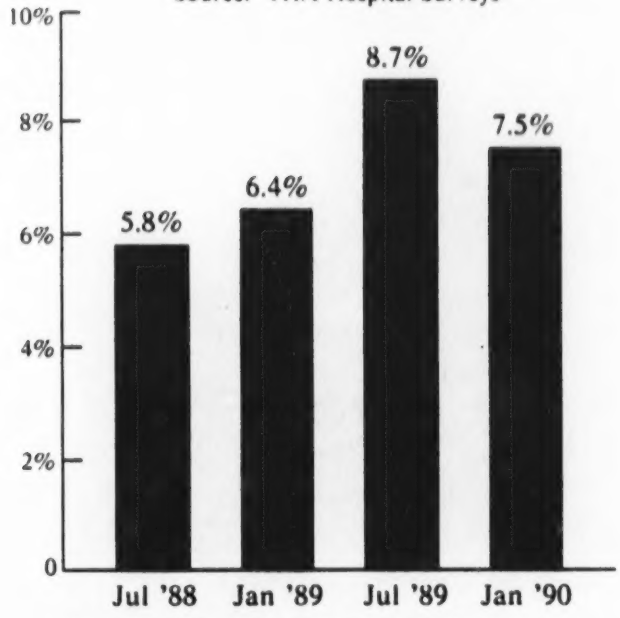


Source: Board of Nurse Examiners

Appendix H

Staff LVN Vacancy Rates

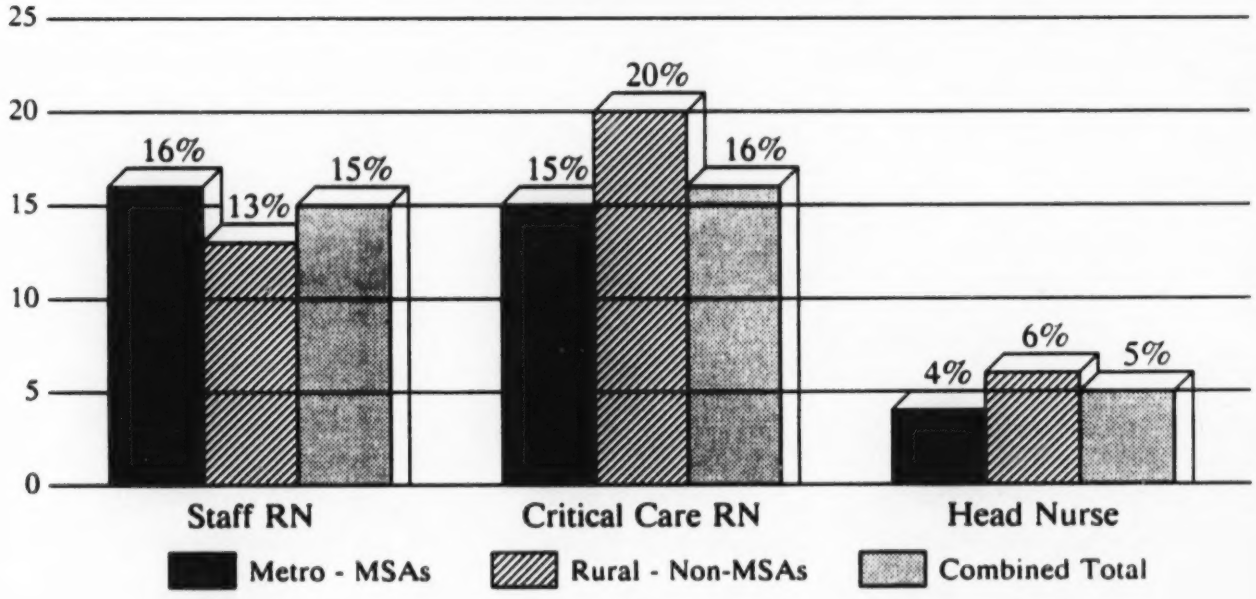
Source: THA Hospital Surveys



Based on Budgeted Vacancies Per FTEs

RN Vacancy Rate by Area-January 1990

Source: THA Hospital Survey, January 1990
Based on Budgeted Vacancies Per FTEs



Key Agencies and Organizations on the Nursing Shortage

"The nursing shortage will persist unless Texas takes immediate steps to increase the number of nursing graduates . . . Quality health care and cost containment are dependent upon an adequate supply of qualified nurses."

Texas Hospital Association media release, 1990

"With more than 300 licensed nurse vacancies, the Texas Department of Mental Health and Mental Retardation considers the current nursing shortage in Texas to be of a critical nature. At this time, the department has been able to maintain nursing levels adequate to provide needed nursing services. However, there is an alarming concern as to whether the department, like other agencies, will be able to remain competitive in the nursing market."

Texas Department of Mental Health Mental Retardation Position Paper, 1990

"Just to make up for the loss of in-migration of RNs, nursing programs must double the number of graduates they are producing."

Texas Nursing Foundation, 1990

"Our whole medical delivery system has changed dramatically in the last 10 years. Entire hospitals function like intensive care units did a decade ago, and nursing homes are caring for the patients who would have been in hospitals 10 years ago. This is why Congress mandated more skilled nursing in nursing homes . . . If we do not educate an adequate number of nurses, the wage war among health care providers will escalate, pushing the cost of health care significantly higher, while the quality of care will deteriorate."

Texas Health Care Association, 1990

"We have a 47 percent vacancy rate for staff nurses."

Texas Department of Corrections, 1990